WHAT IS CLAIMED IS:

1. A blood plasma lipids in-vitro filtering method, comprising the following steps:
separating blood plasma from collected blood;
carrying out flushing with saline solution;
controlling temperature and pressure of the blood plasma;
passing the blood plasma to screening procedure for filtering; and
feeding the blood plasma back to the blood after the filtering step.

2. The method as claimed in Claim **1**, wherein the separating step comprises a stepwise separation process for separating the blood plasma at about 150-250 milliliters of blood plasma each time.

3. The method as claimed in Claim **1**, wherein the blood plasma passes to the screening procedure at a speed of 20-30 milliliters per minute.

4. The method as claimed in Claim **1**, wherein in the screening procedure, pressure is controlled below 60KPa.

5. The method as claimed in Claim **1** further comprising a step of making temperature of the blood plasma approximately equal to body temperature.

6. The method as claimed in Claim **1**, wherein the screening procedure comprises three films, of which a first film is membrane that has filter aperture pores of about 0.3 to 0.65 microns and comprises a lipid absorptive material, a second film is a membrane that has filter aperture pores of about 0.3 microns, and a third film is a membrane that has filter aperture pore of about 0.2 microns and comprises nylon as a base material.

7. The method as claimed in Claim **6**, wherein at least one first film is interposed between the second and third films.

8. The method as claimed in Claim **6** or **7**, wherein the lipid absorptive material comprises silicon oxide pellets.

9. An in-vitro blood plasma lipids screening procedure comprising: a blood collecting device, a blood separating device, a pre-filtered blood plasma bag, a blood lipids screening procedure, a post-filtered blood plasma bag, and a blood plasma feedback device, which are connected via tubes, and the tubes being also connected with a peristaltic pump, pressure and temperature control devices being installed among the tubes, the in-vitro blood plasma lipids screening procedure further comprising saline solution treatment bag

and waste saline solution bag, the saline solution treatment bag being connected to an outlet of the pre-filtered blood plasma bag, and the waste saline solution bag being connected to an entrance of post-filtered blood plasma bag.

10. The in-vitro blood plasma lipids screening procedure as claimed in Claim **9**, wherein the pre-filtered blood plasma bag comprises an automatic weight/volume detection device, which selectively transmits a signal indicating that the blood plasma bag is full to the blood separating device and the blood collecting device, thereby triggering a stop response.

11. The in-vitro blood plasma lipids screening procedure as claimed in Claim **9**, wherein the pre-filtered blood plasma bag has a volume of about 150-250 milliliters.

12. The in-vitro blood plasma lipids screening procedure as claimed in Claim **9**, wherein the pressure control device reads out a current pressure inside the tube.

13. The in-vitro blood plasma lipids screening procedure as claimed in Claim **9**, wherein the peristaltic pump is controlled to have a rotational speed that induces a flow rate of the blood plasma at about 20-30 milliliters every minute.

14. The in-vitro blood plasma lipids screening procedure as claimed in Claim **9**, wherein the pressure control device controls the pressure to be below 60KPa.

15. The in-vitro blood plasma lipids screening procedure as claimed in Claim **9**, wherein the temperature control device in installed in the screening procedure.

16. The in-vitro blood plasma lipids screening procedure as claimed in Claim **9**, wherein the temperature control device is operable to have a highest heating temperature at 38°C.

17. The in-vitro blood plasma lipids screening procedure as claimed in Claim **9**, wherein the blood lipids screening procedure comprises three films of which a first film is a membrane which has filter aperture pore of about 0.3 to 0.65 microns and comprises a lipid absorptive material, a second film is a membrane which has filter aperture pore of about 0.3 microns, and a third film is a membrane which has filter aperture pore of about 0.2 microns and is made of nylon as a base material.

18. The in-vitro blood plasma lipids screening procedure as claimed in Claim **17**, wherein at least one first film is interposed between the second and third films.

19. The in-vitro blood plasma liquids screening procedure as claimed in Claim **17** or **18**, wherein the lipid absorptive material comprises silicon oxide pellets.